

Locks & Bolts
Patented

70. LOCKS.

227

Fig. 1.

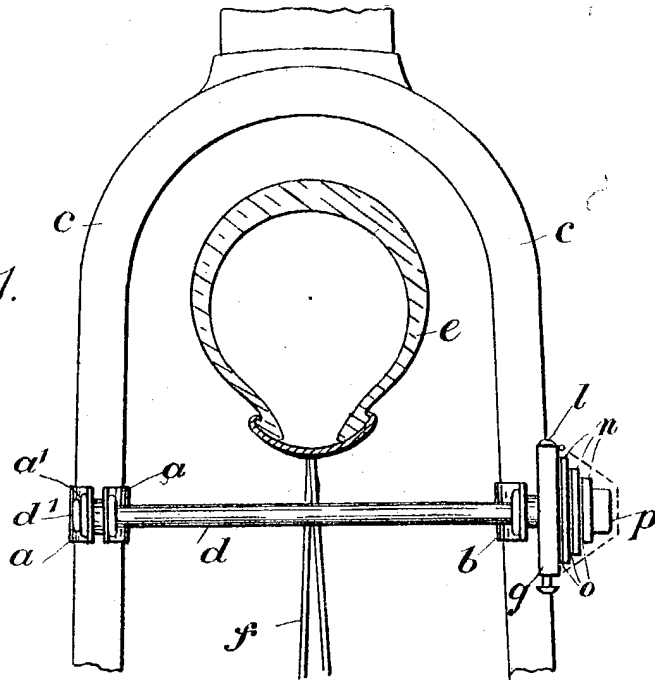


Fig. 2.

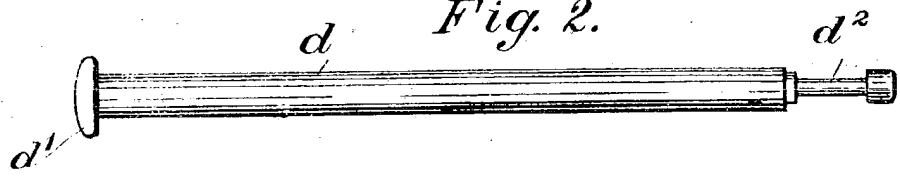


Fig. 4.

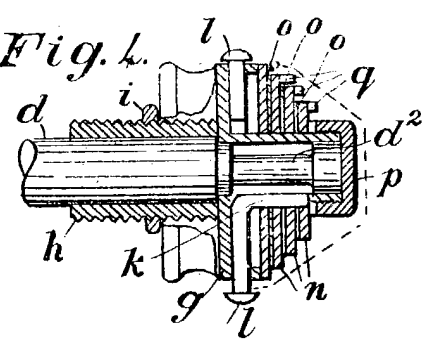


Fig. 3.

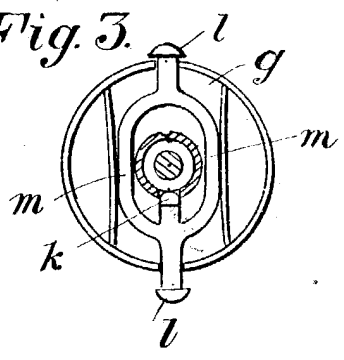


Fig. 5.

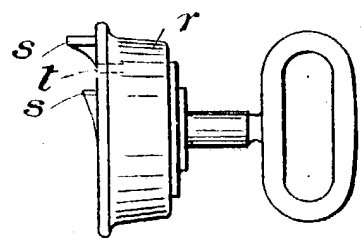
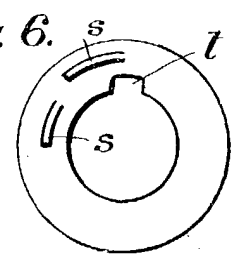


Fig. 6.



[This Drawing is a reproduction of the Original on a reduced scale.]

Fig. 10.

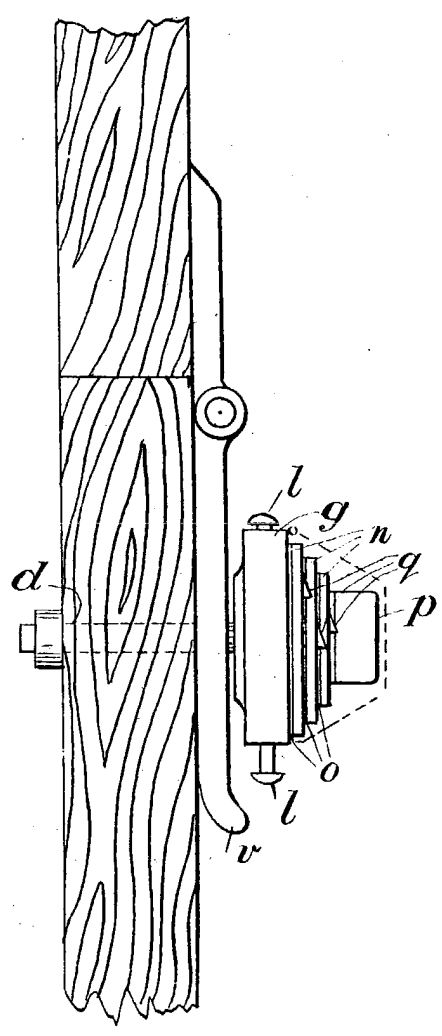


Fig. 9.

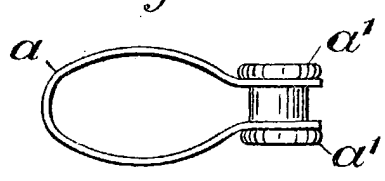


Fig. 7.

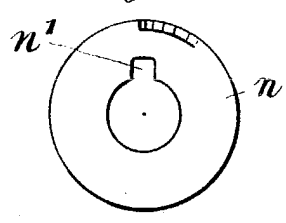
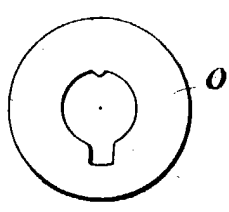


Fig. 8.



N^o 15,982



A.D. 1909

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COMPLETE SPECIFICATION.

Duplicate.

'A New or Improved Construction of Lock suitable for Securing the Wheels of a Cycle whilst being also applicable to other purposes.'

I, JAMES RICHARDSON BROWN, of 30, Foster Street, Brotton, S.O. Yorks, Engine Driver, do hereby declare the nature of this invention and in what manner the same is to be performed to be particularly described and ascertained in and by the following statement:—

- 5 This invention relates to locks for securing the wheels of a cycle so that it is impossible to move the cycle during the owner's absence, and which locks are also applicable for securing travelling trunks, bags, doors, gates, and the like.
And in order that this my invention may be fully understood I will particularly describe same with reference to the accompanying drawings and figures and letters of reference marked thereon, that is to say:—
Fig. 1 illustrates the application of the lock, constructed in accordance with the said invention, to a bicycle wheel which latter is shewn in section, to more clearly shew its attachment to the fork of the machine.
- 15 Fig. 2 is a view of the lock bolt or pin.
Fig. 3 is a face view, with cover removed, of the head of the lock.
Fig. 4 shews the end of the bolt or pin inserted in the lock, the latter being in section.
Figs. 5 & 6 are respectively side elevational face views of the key.
- 20 Fig. 7 is a face view of one of the wards of the lock.
Fig. 8 is a similar view of one of the washers placed between the wards.
Fig. 9 is a plan of one of the clips by which the lock is held in position upon a bicycle fork, and
Fig. 10 shews the application of the invention to a trunk or box.
- 25 Similar letters of reference indicate like parts throughout wherever occurring.
Referring particularly to Figs. 1 to 4 of the drawings *a* and *b* represent two clips which are affixed to the back stays or fork *c* of the cycle and placed high enough to allow of the bolt *d* being passed through the wheel *e* just under the rim of the wheel and between the spokes *f*. One of these clips (*a*) simply carries a boss *a*¹ for the bolt *d* to pass through, the other clip (*b*) carries the head or lock *g* of the bolt. The lock has a long boss *h* (see particularly Fig. 4) that passes through the clip *b* and is secured by means of a nut *i* which at the same time secures the clip *b* on to the cycle stay *c*.
- 30 The bolt *d* (see particularly Figs. 2 & 4) has a small head *d*¹ at one end.
and at the other end is recessed down as at *d*² to allow a key or feather provided in the lock to enter such recess and so prevent the bolt being drawn once the lock is in action. This key or feather (see *k* Figs. 3 & 4) is mounted within the lock *g* and is capable of being raised or lowered into or from the recessed portion *d*² of the bolt *d* by pressing upon one or other of the buttons *l*
- 40 connected by means of the arms *m* to the feather *k*.
The wards of the lock consist of three or more (as shewn, three) circular rings *n*, each with a keyway *n*¹ (see particularly Fig. 7) cut to allow the feather *k* to enter when pushed or drawn out of the recess *d*² in the bolt *d*. It will be understood that there is only one position for these wards to be placed
- 45 in to allow of the feather being withdrawn from the recess in the bolt. To

[Price 8d.]

Brown's New or Improved Construction of Lock.

ensure each ward having an independent movement small metal washers *o* (see Figs. 4 & 8) are placed between such wards, and the whole are kept in position by the cap *p* screwed on to the end or boss of the lock head *g*, and secured permanently by a small screw passing through the side of the cap into the lock head. 5

A claw or projection *q* is formed upon the face of each ward *n*, (see particularly Fig. 4). These claws are operated upon by a key *r*, shewn separately in Figs. 5 & 6, provided with similar claws or projections *s* and a slot or recess *t* which engage with the claws or projections on the wards aforesaid. The claws or projections aforesaid are shaped with one side vertical and the other on the slope so that it is only possible for the key to turn the wards in one direction. 10

The key is not required for securing the lock the bolt being just slipped in and the feather *k* pressed into the recess *d*². One or all of the wards is or are then turned round into any position other than where they were and it is locked—it being impossible for the feather to be withdrawn from the recess in the bolt until the keyways in the wards are all in line to receive it. The key is used to bring the wards round to their relative positions, and then turn them all together until all their keyways are exactly fair for the feather to be pressed into them free of the bolt. To effect this the key *r* is fitted on to the cap *p* and the claw *q* on the first or smallest ward *o* enters the recess *t* in the face of the key, then the key is turned from left to right and the two claws *s* on the key engage with the two claws *q* on the other wards *o*. The button *l* is now pressed and the turning of the key continues when the feather *k* will slip out of the recess *d*² and into the keyways *n*¹ cut in the wards *n* and the bolt can be drawn out. 15 20 25

u Figs. 1, 4, & 10, shews in dotted lines a hinged cover over the wards which may be provided when required as a protection against dirt, dust, *etc.*

In Fig. 10, the lock is shewn as applied to a trunk from which it will be apparent that the said lock can be readily adapted for all purposes to which the ordinary padlock is applicable. In this modification when unlocked the lock is drawn off the bolt or staple *d* to permit of the hasp *v* being raised. 30

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed I declare that what I claim is:— 35

A lock for securing the wheels of a cycle, which is also applicable for securing trunks, doors, and the like, constructed and operating, substantially as hereinbefore described and shewn.

Dated this 5th. day of July, 1909.

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Registered Patent Agents. 40